

## **Exhibit D**



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Complimentary

## Consumer Collections Automation

*A White Paper on Apollo Enterprise Solutions' CCA Solution*

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## Executive Summary

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Consumer collections has always been about volume. It therefore comes as no surprise the emphasis on cost containment and productivity enhancement that has marked the last couple of decades has prompted collection professionals to seek new ways to automate the labor intensive recovery process. The need to document all collection activities in order to substantiate compliance with a host of mandated regulations has provided additional impetus.

Research indicates that consumer debt, and therefore the collection of that debt is a growing proposition. Consider the following:

- Consumer credit liabilities have increased from \$70 billion in 1985 to more than \$300 billion at the end of 2004—a 7.5 percent compound growth rate
- Non-business bankruptcy petitions rose 8.4 percent annually between 1986 and 2005
- Credit card charge offs went from slightly over \$1 billion in 1985 to \$14 billion by the end of 2004—a 12.5 percent annual increase

With increases in consumer debt outpacing economic growth, we expect credit grantors and their agents to increasingly turn to automation to improve productivity, and thereby manage the growing volume of consumer debt with limited resources. In the face of volume growth and increasing regulation, there is no other means by which companies can simultaneously improve recovery and contain costs. Consumer Collection Automation (CCA) applies software solutions and other technologies to the full spectrum of the customer credit lifecycle.

This report is written for those survey respondents who are actively exploring CCA solutions. Beginning with an introduction to CCA, it highlights the various components of the CCA universe. It concludes with an in-depth profile of one of the top vendors in this space—Apollo Enterprise Solutions—describing in detail Apollo's CCA solution and the company's approach to CCA.

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## Introduction

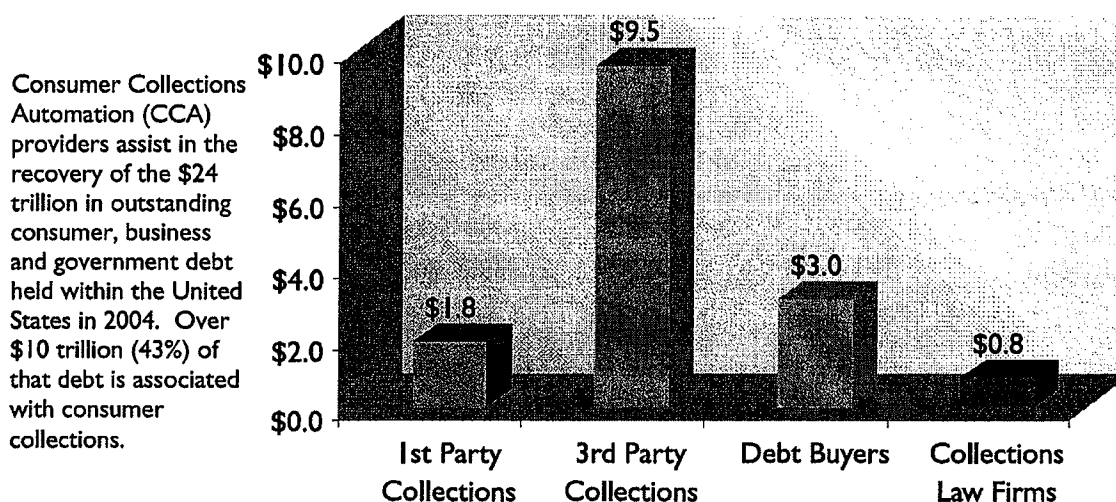
The collections industry, like the debt it strives to recover, has changed with age. An industry that in the early days was distinguished by small shops populated by tenacious personnel equipped with a keen sense of human nature has been transformed into a technology dominated mass production environment. Today, the standard is multinational corporations guided by workflow driven software supported by more precise real-time collection capabilities and analytics than anyone in the industry could have dreamed possible just a few decades ago.

The growth of debt in America and around the world has meant a growth in past due receivables, and consequently the service organizations whose purpose is to collect those delinquent accounts. The accounts receivable collections industry earned more than \$15 billion in 2004 from a pool of some \$24 trillion in outstanding consumer, government and business debt. Consumer debt alone amounted to \$10.3 billion, 43 percent of the total.

The industry is changing in other ways as well; experiencing an unprecedented wave of consolidation from mergers and acquisitions. In 2004, for example, 154 deals were concluded in which over \$1.5 billion changed hands. Roughly twenty percent of these purchases involved companies servicing consumer debt.

To better serve its customers the collections industry has also developed areas of specialization. However, whether a firm is working early or late stage accounts, whether they are collecting on a first-party or third-party basis, they all use automation to accomplish their tasks. Today there are over 75 software firms that cater to one or more areas of the accounts receivable industry.

FIGURE 1: SOURCES OF \$15 BILLION COLLECTED FROM \$24 TRILLION OF U.S. DEBT



## The Case for Consumer Collections Automation

In addition to the increase in the sheer number of consumer debtors, the size and sophistication of each consumers' electronic footprint has become more complex to track and cover. Technology has become the great equalizer within the consumer collections segment as well as other parts of the accounts receivable collections industry. Quite simply, technology has made it possible to blanket the growing demand for consumer collections without dramatic growth in collections personnel.

Coupled with the ability of technology to handle the influx of consumer debt information is the growing acceptance of electronic payment channels for debt settlement. Indeed, as reported by the Federal Reserve, the number of consumer electronic payments eclipsed paper payments for the first time in 2003. To be precise, the total numbers for 2003 were:

- 44.5 billion electronic payment transactions
- 36.7 billion transactions paid by check

Clearly, when it comes to payments, consumers today require a level of convenience and control inconceivable years ago. They want the freedom to select the channel and method of their payments, as well as the frequency and timing. Conventional paper checks cannot provide this level of flexibility, so consumers are turning to electronic payment options—credit card, debit card, and ACH transactions initiated over the Internet or telephone—that provide greater control over their time and money. While checks will remain a consumer payment mainstay for years to come, billers should not overlook the sea change in consumer bill payment behavior underway now.

As bill paying options increase, they hold out the promise of dramatically impacting the recovery process. While more options provide collectors with additional tools for securing payment, automated bill payment protocols will have an even greater effect by reducing the volume of work that must be addressed by live collection agents. This in turn will result in changes to the means by which delinquencies are addressed and ultimately recovered.

Consumer Collections Automation (CCA) solutions enable companies with a large consumer customer base to streamline the unpaid bill process by combining diverse information sources, utilizing intelligent powerful analytics and automatically customizing resolution workflow actions according to individual client distinctives. CCA solutions include a wide range of processes to guarantee the optimal collection amounts on a massive number of outstanding bills while minimizing the operational cost of the credit and collections department.

## What is Consumer Collections Automation?

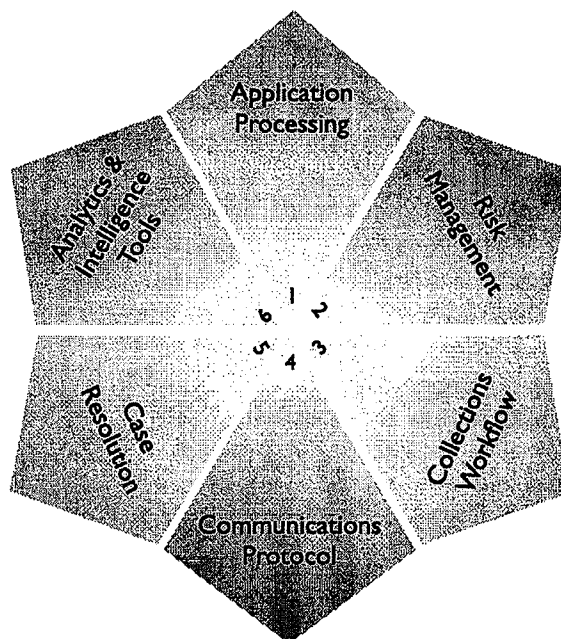
The CCA industry provides end-to-end solutions to accommodate diverse require-

ments such as analyzing and quantifying consumer risk; identifying early fraud/delinquency; utilizing VMS (Voice Management Systems) technology efficiently to interact with customers, and resolving cases to ensure a final solution that will maximize the amount collected in a timely manner. We consider the following components to be a part of the CCA universe:

- » **Application Processing:** When consumers decide to purchase a company's product or service, this component handles the evaluation of his/her credit capacity by extracting information from different Credit Bureaus and correlating data with other external or internal sources. The outcome of this process will generate a score that can be matched against established profiles to identify the potential credit risk. This score might be used to reject or accept the application, or forward the file to an analyst for final determination. The profile information is then accurately gathered and transferred to the account's file. The association between risk profile and account information is critical for future workflow processing efficiencies.
- » **Risk Management.** Moving an account to collections requires a complex set of rules handled by sophisticated analytical tools. Choosing the appropriate accounts for collection activities at the appropriate time can reduce bad debt risk and optimize the chances of collecting the overdue revenues. The system has to compare data coming from (among other sources) the customer profile, billing statements and payment records to make a deci-

FIGURE 2: CONSUMER COLLECTIONS AUTOMATION (CCA) MAP

CCA solutions enhance the cash recovery process by streamlining how organizations approve credit, manage risk, and collect delinquencies. Though they may be quite different in terms of emphasis and product scope, each of the solutions profiled in this report is focused on the CCA universe. The accompanying CCA Map provides a visual representation of the major technology touch-points comprising the cash recovery process.





sion. Early risk identification involves systems capable of estimating the future ability to pay and even acting proactively upon high risk accounts (before even the invoice is due). A natural extension of risk management involves early fraud detection systems that identify unexpected account behavior such as excessive ordering, surprisingly high credit line utilization as well as more sophisticated indicators including utilization norms for the types of products being ordered. To avoid out-dated records, innovative analytics will, on the backend, constantly update the profile throughout the account life cycle.

- » **Collections Workflow.** The key innovation of a fully integrated solution is the capacity to automatically build customized workflows involving sophisticated decision trees that can be applied to specific accounts based on the risk, the account profile information and the characteristics of the past due invoice. Even though the process is fully automated, agents can monitor priority accounts in terms of credit and recovery status. A pre-defined set of rules associates each account to a collections team and helps balance the teams workload. The most efficient systems distinguish between fully automated accounts and those that required manual assistance by collections agent. Customer work queues define the next action to be taken during the collections process. Finally, account payment behavior can be determined by the systems capacity to store and analyze historical account information, thus enabling system refinements to address specific customer behaviors.
- » **Communications Protocol.** The use of automated web-channels and other communications protocols will dramatically minimize the capital intensive activity of human-based call centers. Today's systems provide state-of-the-art voice synthesizers to automate outbound messaging. Integrated skip tracing tools further fine tune the successful message delivery ratio. Inbound messaging capabilities also facilitate case resolution without agent intervention. Depending on customer characteristics, the system will choose the most effective recovery channel (Notification Letter, SMS, Email, IVR, Standard Voice call...) to reach the customer and collect what is owed. The combination of these new technologies with powerful analytics will enable companies to successfully reach massive number of accounts in record time, thereby dramatically boosting current agent utilization rates.
- » **Case Resolution.** Accounts exit the collection process by paying in full, otherwise settling the debt, being placed with a third party agency or attorney, or by being sold as part of a debt portfolio. Prior to placement, analytical tools assist in determining the potential maximum amount a delinquent customer can pay. Negotiating partial payments and promises to pay usually requires human intervention, however, online tools can now handle some settlement activities for selected groups of accounts willing and able to use web-based technologies. These solutions provide a virtual



negotiating table by offering settlement options and considering customer settlement proposals based on the accounts' calculated ability to pay. Today's advanced systems can also schedule and execute claim placement routines to close the loop in delinquency cases. Portfolio placement tools further enable businesses to redirect debt portfolios to third parties capable of extracting more value thanks to a higher degree of specialization.

- » **Analytics and Intelligence Tools.** A significant portion of any customer base is likely to end up in the collections process; next generation technology has the ability to apply artificial intelligence across highly diverse scenarios and propose unique resolution workflows to maximize recovery amounts and shorten the collections timeline. This is possible through advanced analytical tools capable of monitoring data derived from an extensive pool of process variables related to the entire collections cycle, and the tool's ability to learn from the process in order to modify future behavior. Classic rule-based algorithms are still needed to provide more control and monitor routine process check points. Analytics are also widely used to segment the current debt portfolio and execute third party placements. Standard reporting tools complement human monitoring of collector behavior and system efficiency by extracting routine statistics such as those involving the number of accounts, outstanding debt or collections recovery ratio.

## The Different Flavors of CCA

All CCA solutions share the goal of improving recovery rates and efficiency. However, not every solution follows the same approach or provides equivalent functionality at every stage of the process. Clearly there is no single, all encompassing CCA solution. For this reason it is critical to understand the different flavors CCA can take.

### Contact & Workflow Management System

Many vendors provide solutions that concentrate on providing a comprehensive contact management system. When collections was a manual process, the customer file was the focus point of all collection activities. It is not surprising that the first computerized collections systems would essentially computerize the customer file, adding additional value by building supplemental collection tools to support the most common tasks collectors need to complete in order to be successful in their recovery efforts.

Even today, the system of record remains the backbone of every collection shop. The contact and workflow management software that automates the system of record is the prime element that drives collector productivity and the overall efficiency of the collection department's recovery efforts. These gains are accomplished by automating many of the manual tasks collectors must perform in support of their customer contact efforts as well as by building in strategic workflow capabilities to drive the automated collection process.

A contact and workflow solution should also provide a platform for building in other types of collection automation such as auto-dialers, campaign management tools, inbound and outbound IVR, automated web channels, scoring and advanced analytics.

TABLE I: CCA SOLUTION TYPES

Solution Type	Description
<b>Contact &amp; Workflow Management</b>	Solutions that are built on a foundation consisting of the customer credit file. This foundation is then integrated with contact management and workflow tools to facilitate collection efforts. These solutions may also function as the system of record.
<b>Optimization &amp; Campaign Management</b>	Analytical solutions that take advantage of the visibility provided by systems of record or external data sources (credit bureaus) to increase collection effectiveness and efficiency.
<b>Automated Recovery Channels</b>	Intelligent, customer facing processing solutions that deliver information, offer settlement options, transact settlements and record customer responses without the need for agent interaction with the customer.

Such a collection platform can be readily configured to suit the unique needs of the software's users. The key is interoperability in order to provide users with an integrated interface and end-to-end customer life-cycle management.

### Optimization & Campaign Management

Optimization and campaign management are two sides of the same coin. The goal is to collect as much as possible with the resources at hand. That requires analytical tools that provide the big picture as well as insight into the recovery process. You need to be able to see both the forest and the trees. With better visibility into your debt portfolio as well as the operational capabilities of your resources, you can then use campaign management tools to optimize performance.

Advanced analytics allow you to customize scoring in order to address performance issues across the entire customer life-cycle, not just at the prospect or new account approval stages. Custom scoring can provide insights that will help you apply appropriate treatment regimens to existing customers, and thereby increase recoveries as well as

TABLE 2: CCA SOLUTION TYPES

Solution Type	Contact & Workflow Management	Optimization & Campaign Management	Automated Recovery Channels
CCA Universe			
Application Processing			
Risk Management	IDS Communications Manager™	IDS Portfolio Manager™	IDS Product Family
Collections Workflow	IDS Communications Manager	IDS Portfolio Manager IDS Decision Engine™	IDS Product Family
Communications Protocol	IDS Communications Manager	IDS Portfolio Manager	IDS Product Family
Case Resolution		IDS Portfolio Manager IDS Decision Engine	IDS Product Family
Analytics & Intelligence Tools		IDS Portfolio Manager IDS Decision Engine	IDS Product Family

identify opportunities to increase revenues and profitability within your existing portfolio. Analytics also enable you to identify heretofore unattainable insights into your recovery processes (e.g. a collector's percent of promised payments that are received or the treatment strategy that has proven to work best with a particular customer status), thereby allowing you to fine tune your recovery efforts for peak performance.

Campaign management tools are more effective when they are supported by a strong analytical base. The ability to shift workloads on the fly or reassign treatment strategies is enhanced when analytics are driving the selection and prioritization of collection activities. While campaign management solutions typically contain champion/challenger capabilities, advanced analytics can take you a step further by modeling outcomes. It is clearly a case of visibility providing predictability, which in turn facilitates greater control over the recovery process.

### **Automated Recovery Channels**

An automated recovery channel can take several forms: in particular inbound IVR, outbound IVR, and web settlement channels. IVR tools not only reduce collector workloads, but can also accelerate recoveries on their own account by providing debtors ready access to account information and payment options.

Web channels provide a similar function, but via the internet instead of telephony. Consumers are becoming increasingly comfortable with using online payment portals. The next generation of web channel solutions provide online payment negotiations, which are proving to be the preferred avenue for some consumers to resolve their debts. So not only is productivity enhanced by automated recovery channels, but customer satisfaction, too.

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## *Apollo Enterprise Solutions*

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### **About Apollo**

Apollo Enterprise Solutions, founded in January 2003 in Irvine, California, provides an enterprise-class, hosted solution called Intelligent Debt Solutions for Debtor Self-Settlement™, or IDS for short. First introduced in October 2004, the target market of Apollo's IDS is primary creditors which includes credit card issuers, medical facilities, utility companies, telecommunications, cable and satellite providers, healthcare providers, legal recovery firms, debt buyers and sellers and collection agencies.

Apollo's hosted service is intended to change the fundamental processes in the debt collection industry by significantly improving debt recovery at reduced operational costs while at the same time enabling debtors to settle their debt with a sense of personal empowerment. Apollo is the first Web-based, real-time, rules-based, self-settlement system to incorporate bureau data and analytics and decisioning intelligence that match a debtor's current ability to pay.

Apollo's competitors are Debt Resolve & Online Resources, each of which has an online payment system. And yet, neither of these other companies has a decision engine that incorporates credit bureau data with enterprise organizational deployment capabilities. Combining portfolio management, decisioning intelligence, bureau analytics, advanced modeling, Web-based distributed reporting and advanced system security exceeds the feature sets of competitors in their space. Indeed, Apollo boasts it has the "most advanced solutions in marketplace."

### **Apollo's Consumer Collections Automation**

Apollo's "Decisioning Intelligence"—the use of bureau data and analytics combined with creditor/collector defined guidelines—provides the debtor with offers that are matched to their current situation, thereby increasing the number of successful accounts recovered and at higher amounts per account. As debtors engage in an online session, IDS can access the debtor's credit report from any—or all—of the three credit bureaus as well as other sources of scoring data, and using its proprietary intelligent decision-making software, initiate settlement offers that are appropriate to each debtor based on their ability to pay.

The system is so flexible and "intelligent," it offers debtors an opportunity to propose an altogether different debt resolution schedule than any the system suggests. For example, as a debtor, instead of accepting an offer to pay off a \$1,000 debt in 2 payments of \$540 or 5 payments of \$210, I might offer 10 payments of \$110. If I qualify, based on my credit report score and history, Apollo's IDS will accept the proposal on the spot.

Existing collection methods include outbound call centers with low hit rates and high training and administrative costs, expensive inbound toll-free numbers and ineffective mail campaigns. In contrast, clients using IDS can encourage debtors to use the online system by guaranteeing a discount, but still realize higher net dollars per settlement due to the reduced costs associated with IDS' process.

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The IDS offering is actually three products that may be used independently of one another or in combination. The IDS product discussed thus far is sold separately as IDS Pay and Collect, and is designed for early stage collections. IDS Recover is designed for the late stage collection of charge off accounts. IDS Pay, IDS Collect and IDS Recover are end-to-end solutions. The systems include but are not limited to data integration and normalization tools, portfolio management tools, integrated communications modules for email, IVR and SMS integration. They also come with authentication and security applications, a bureau server to receive and manage credit reports, a bureau parser to segment a machine-readable credit report.

Other features of The IDS offering include the IDS Decision Engine that calculates and presents offers to the debtor, the IDS payment scheduling manager, the IDS payment processor and trust-account processor, the IDS accounting manager to integrate the transactions to the GL system of record and the IDS reporting manager to provide distributed Web-based reporting.

Apollo's IDS has a universal XML-based Web Service Interface that allows real-time interfacing with any business system. Advanced ETL mapping allows batch importing/exporting of ASCII, TXT, CSV, XLS or XML files into/from any legacy system.

Apollo incorporates some of the most stringent security policies in the industry. Debtors must authenticate with a Unique Account ID, mailed to their primary address, plus an optional partial or whole Social Security number in order to access their account info. If desired, any debtor data fields provided by the client can also be used for login authentication as well. Even higher levels of authentication are available, including Level 3 credit bureau challenge-response questions from a debtor's credit bureau. Apollo's IDS is hosted in a secure, SAS 70 Type II audited facility.

Each implementation involves some type of customization based on customer requirements of functionality and the scope of integration with existing applications such as billing and collection software, GL systems, reporting tools, letter systems, dialer/IVR products, scoring and analytics tools or models and payment gateways. As part of the standard implementation, the Apollo Professional Services and Implementation Team provide all necessary integration and customization services. Integration to each of these systems is not mandatory; however, the more tightly bound the Apollo IDS system is to the system(s) of record, the greater the value proposition to the customer.

The average integration is approximately 120 hours or 30 days for a standard deployment. The main factors that determine the length of the implementation are receiving the proper data from the client and gaining access to the clients system(s) of record. Closely scoping the requirements and integration paths in the beginning of the deployment is key to managing the implementation process.

The IDS customer has total flexibility to create, customize and distribute reports based on user roles, rights and privileges. The reporting interface can provide reports to users in any format and can also interface with any enterprise reporting application such as Microsoft reports, Actuate or Business Objects to leverage a reporting tool already deployed in the enterprise.



Apollo offers complete training programs to all of their clients. Training materials are available in a number of formats including printed user documentation, Web-based help files and a Flash-based tutorial program. Additional technical support is available Monday through Friday 8 AM to 5 PM Pacific Standard Time with after-hours support available year-round, 24 hours a day, from service technicians accessible by pager.

## Outlook

For a limited time Apollo is offering almost instant ROI by waiving all annual licensing fees, setup fees and training costs. In order to blanket their target market they are making themselves available at most of the industry specific trade shows scheduled for the 2006 including the Source Media series – Credit Card Collections Conference, National Collections and Credit Risk, and Card Forum. They will also appear at the Collection Advisor – Cat Expo, the ACA International Debt Buyers Conference and a number of healthcare and telecommunications trade shows.

Apollo currently enjoys the benefit of strategic partnerships with Experian – as preferred data partner, PlaNet Consulting – with a strategic sales and marketing agreement, and with First Data – for security and transactions. New features planned for Apollo's next release of IDS include real-time optimization of settlement offers, real-time integration into existing systems and a process alarm console. Apollo has come a long way in a short amount of time.

According to Apollo's CEO, Mr. Christopher Imrey, "The IDS system is truly the first application of its kind to leverage existing software platforms and network infrastructure, while integrating real-time bureau scoring tools, credit reports and customer account data to deliver realistic settlement offers, payment options and negotiating tools to the debtor." After our conversations with their management and a demo of their solution we see great promise for Apollo in the years ahead.



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## About PayStream Advisors, Inc.

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PayStream Advisors is a technology research and consulting firm that improves the way companies plan, evaluate, and select emerging technologies to achieve their business objectives. PayStream Advisors assists clients in sorting through the growing complexities of IT applications related to financial automation with the goal of making objective, analytical, and actionable recommendations. Our clients include leading companies in the financial services, oil and gas, telecommunications, and waste management industries. Wherever financial automation technology is an issue, PayStream Advisors is there to help. For more information, call (704) 523-7357 or visit us on the Web at [www.paystreamadvisors.com](http://www.paystreamadvisors.com).

### About the Lead Analyst

A graduate of The University of Michigan, David Schmidt spent 17 years in corporate credit management, including stints at Dun & Bradstreet and Remington Rand. Then, in 1994, he founded consulting firm specializing in process improvement and cash flow optimization. A thought leader in the credit and collection profession, David has published well over 100 articles in a variety of trade and business publications including *Business Credit*, *Collection Advisor* and *Business Finance Magazine*, where he was a contributing editor. He remains a contributing editor with monthly newsletter *Credit Today* and is co-author of the seminal text on automating collections, "*Power Collecting: Automation for Effective Asset Management*," (1998, John Wiley & Sons, NYC). David was also the lead analyst for PayStream Advisors' Spring 2005 report, "*Receivables & Collections Management: A Buyers Guide to Collections Automation Solutions*." He is a member of the Credit Research Foundation (CRF), the Federation of Credit and Financial Executives, and the National Association of Credit Management (NACM). David has also presented workshops and spoken at conferences throughout the country.